

Title (en)

NEW PROCESS FOR THE NITRATION OF AROMATIC COMPOUNDS IN MILD, NON-CORROSIVE CONDITIONS

Title (de)

VERFAHREN ZUR NITRIERUNG VON AROMATISCHEN VERBINDUNGEN VERBINDUNGEN UNTER MILDEN, NICHT KORROSIVEN BEDINGUNGEN

Title (fr)

NOUVEAU PROCEDE DE NITRATATION DE COMPOSES AROMATIQUES DANS DES CONDITIONS DOUCES ET NON CORROSIVES

Publication

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Application

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Abstract (en)

[origin: WO9419310A1] The present invention provides a process for the nitration of aromatic substrates. In one process, an aromatic substrate is reacted with a silicate, optionally modified with a metal nitrate, in the presence of an acid anhydride and an organic solvent, followed by the addition of reduced amounts of nitric acid. Isolation of the nitrated products involves filtration, washing and solvent removal. This process can produce either mono- or polynitrated aromatic compounds depending upon the conditions selected and the aromatic substrate. The present invention also provides related processes for the nitration of strongly activated aromatic substrates using only silicates modified with metal nitrate in the presence of acid anhydrides and an organic solvent. All of these processes provide advantages in yield, cost, and safety over the industrial methods of nitration using mixed acids.

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